

SEQUENCE LISTING

<110> Descenzo, Richard

Ireland, Nancy

<120> Lipoxygenase Genes From Vitis Vinifera

<130> 29520/37890

<150> 60/241,220

<151> 2000-10-16

<160> 45

<170> PatentIn version 3.0

<210> 1

<211> 862

<212> PRT

<213> Vitis LOX 1

<400> 1

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 35 40 45

Leu Phe Gly Gln Gly Val Ser Leu Gln Leu Val Ser Ala Val His Gly
 50 55 60

Asp Pro Ala Asn Gly Leu Gln Gly Lys Leu Gly Lys Pro Ala Tyr Leu
 65 70 75 80

Glu Asp Trp Ile Thr Thr Ile Thr Ser Leu Thr Ala Gly Glu Ser Ala
 85 90 95

097852-101601
 1097852-225260

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Leu Leu Gly Ile Ser Leu Ile Glu Val Leu Ser Arg His Ser Ser Asp
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Glu Val Tyr Leu Gly Gln Arg Asp Thr Pro Glu Trp Thr Leu Asp Thr
785 790 795 800

Thr Pro Leu Lys Ala Phe Glu Lys Phe Gly Arg Lys Leu Ala Asp Ile
805 810 815

Glu Glu Met Ile Ile Asp Arg Asn Gly Asn Glu Arg Phe Lys Asn Arg
820 825 830

Val Gly Pro Val Lys Ile Pro Tyr Thr Leu Leu Tyr Pro Thr Ser Glu
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Gly Gly Leu Thr Gly Lys Gly Ile Pro Asn Ser Val Ser Ile
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<211> 4687

<212> DNA

<213> Vitis LOX 1

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<213> Vitis LOX 2

<400> 3

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Gln Gly Val Pro Leu Gln Leu Val Ser Ala Val His Gly Asp Pro Ala
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Asn Gly Leu Gln Gly Lys Ile Gly Lys Pro Ala Tyr Leu Glu Asp Trp
65 70 75 80

Ile Thr Thr Ile Thr Ser Leu Thr Ala Gly Glu Ser Ala Phe Lys Val
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Thr Phe Asp Trp Asp Glu Glu Ile Gly Glu Pro Gly Ala Phe Ile Ile
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Arg Asn Asn His His Ser Glu Phe Tyr Leu Arg Thr Leu Thr Leu Glu
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Thr Tyr Leu Pro Ser Glu Thr Pro Gly Pro Leu Arg Lys Tyr Arg Glu
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Gly Glu Leu Val Asn Leu Arg Gly Asp Gly Thr Gly Glu Leu Lys Glu
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Trp Asp Arg Val Tyr Asp Tyr Ala Tyr Tyr Asn Asp Leu Gly Asn Pro
195 200 205

Asp Arg Asp Leu Lys Tyr Ala Arg Pro Val Leu Gly Gly Ser Ala Glu
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Tyr Pro Tyr Pro Arg Arg Gly Arg Thr Gly Arg Pro Pro Ser Glu Lys
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Asp Pro Asn Thr Glu Ser Arg Leu Pro Leu Val Met Ser Leu Asn Ile
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Tyr Val Pro Arg Asp Glu Arg Phe Gly His Leu Lys Met Ser Asp Phe
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Ala Ile Glu Thr Trp Val Lys Glu Tyr Cys Ser Phe Tyr Tyr Lys Thr
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Asp Glu Met Val Gln Lys Asp Ser Glu Leu Gln Ser Trp Trp Lys Glu
660 665 670

Val Arg Glu Glu Gly His Gly Asp Lys Lys Asp Glu Pro Trp Trp Pro
675 680 685

Lys Met His Thr Val Lys Glu Leu Ile Glu Thr Cys Thr Ile Ile Ile
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Trp Val Ala Ser Ala Leu His Ala Ala Val Asn Phe Gly Gln Tyr Pro
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725 730 735

Pro Glu Glu Gly Thr Pro Glu Tyr Glu Glu Leu Lys Ser Asn Pro Asp
740 745 750

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755 760 765

Ile Ser Leu Ile Glu Val Leu Ser Arg His Ser Ser Asp Glu Val Tyr
770 775 780

Leu Gly Gln Arg Asp Thr Pro Glu Trp Thr Leu Asp Thr Thr Pro Leu
785 790 795 800

Lys Ala Phe Glu Lys Phe Gly Arg Lys Leu Ala Asp Ile Glu Glu Met
805 810 815

Ile Ile Asp Arg Asn Gly Asn Glu Arg Phe Lys Asn Arg Val Gly Pro
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Val Lys Ile Pro Tyr Thr Leu Leu Tyr Pro Thr Ser Glu Gly Gly Leu
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<212> DNA

<213> Vitis LOX sequence 2

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0070522 1054

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